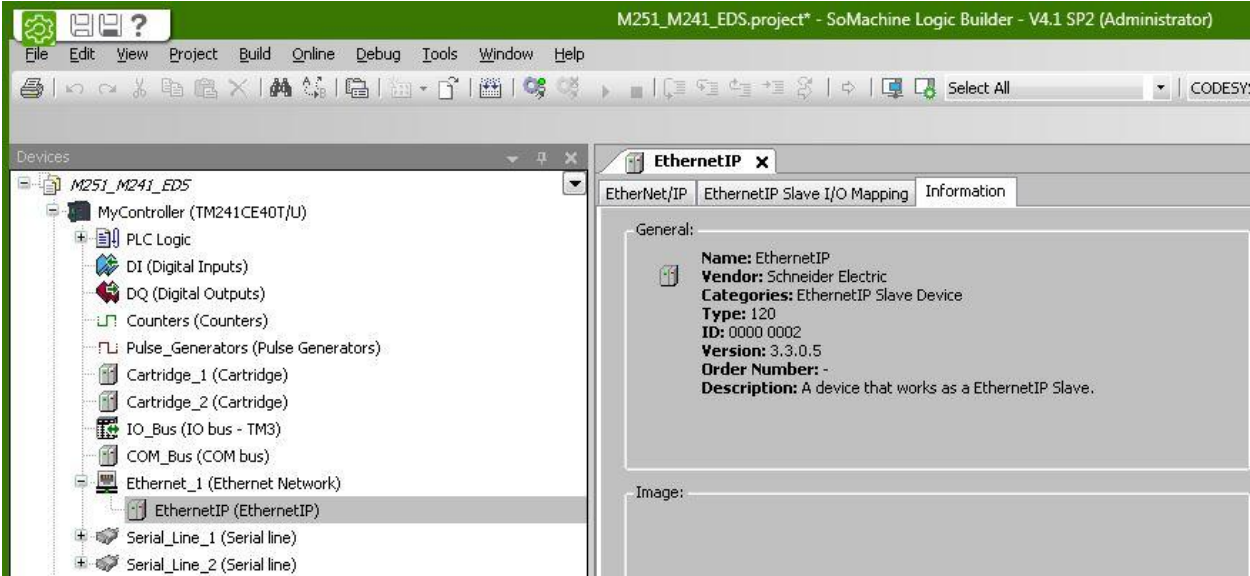
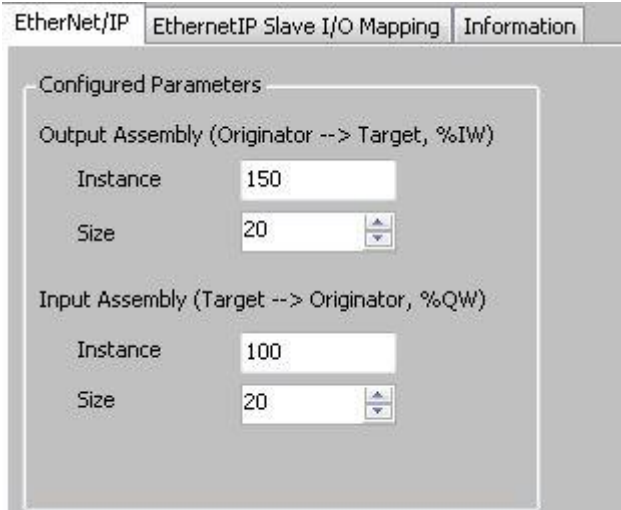


To communicate to a M241 via Ethernet/IP, the correct object has to be added to the SoMachine project for the M241. The required object is the Ethernet/IP Slave Device:



This object allows configuring the Ethernet/IP relevant settings like instance and number of exchanged words (max. 120 words per direction):



Furthermore, the mapping for the IOs has to be done in this object:

The screenshot shows the 'EthernetIP Slave I/O Mapping' window. It features a tree view on the left with 'Input' expanded. The main area is a table with the following columns: Variable, Mapping, Channel, Address, Type, Default Value, Unit, and Description. The table lists 16 bits (Bit0 to Bit15) and 3 words (IW0, IW1, IW2) mapped to specific addresses and types.

Variable	Mapping	Channel	Address	Type	Default Value	Unit	Description
Application.POU.flanco_T0	Bit0	Bit0	%IX6.0	BOOL	FALSE		
Application.POU.flanco_T1	Bit1	Bit1	%IX6.1	BOOL	FALSE		
Application.POU.flanco_T2	Bit2	Bit2	%IX6.2	BOOL	FALSE		
		Bit3	%IX6.3	BOOL	FALSE		
		Bit4	%IX6.4	BOOL	FALSE		
		Bit5	%IX6.5	BOOL	FALSE		
		Bit6	%IX6.6	BOOL	FALSE		
		Bit7	%IX6.7	BOOL	FALSE		
		Bit8	%IX7.0	BOOL	FALSE		
		Bit9	%IX7.1	BOOL	FALSE		
		Bit10	%IX7.2	BOOL	FALSE		
		Bit11	%IX7.3	BOOL	FALSE		
		Bit12	%IX7.4	BOOL	FALSE		
		Bit13	%IX7.5	BOOL	FALSE		
		Bit14	%IX7.6	BOOL	FALSE		
		Bit15	%IX7.7	BOOL	FALSE		
		IW0	%IW3	WORD			
		IW1	%IW4	WORD			
		IW2	%IW5	WORD			

If this application has been downloaded to a M241, a corresponding EDS file will be generated and downloaded to the M241 (file system of M241 -> /user/EIP/):

The screenshot shows the 'MyController' software interface. The 'Runtime' tab is active, displaying the file system of the M241 controller. The file list shows three files generated for the application:

Name	Size	Modified
TM241CE40T_U@0080F40A6609.eds	2.31 KB (2,367...)	8/9/2016 9
TM241CE40T_U@0080F40A6609.ico	9.44 KB (9,662...)	8/9/2016 9
TM241CE40T_U@0080F40A6609.gz	4.38 KB (4,486...)	8/9/2016 9

Now the M241 programmer should download the EDS from the PLC to the PC.  
 The EDS file can be imported in the Rockwell software and should implement the M241 into the device repository as an EtherNet/IP adapter (slave) device.

If the device is available in Rockwell programming environment after the import, the device can be added and the connections configured (predefined by the EDS):

**New connection**

generic connection (free configurable)  
 predefined connection (EDS-File)

Choose a connection

Connection Name	O-->T size (byte)	T-->O size (byte)
Write Data to 150	40	
Read From 100 / Write to 150	40	40
Read Data from 100		40

Generic Parameters

Connection Name: Write Data to 150  
 Transport Type: Exclusive Owner  
 Connection Path: 20 04 24 03 2C 96 2C C6  
 Timeout Multiplier: 4

Scanner to Target (Output)

O-->T Size (Bytes): 40  
 RPI (ms): 100  
 Trigger Type: Cyclic  
 Inhibit Time (ms): 0  
 Config#1 Size (Bytes): 0  
 Config#2 Size (Bytes): 0  
 Connection Type: Point to Point  
 Fixed/Variable: Fixed  
 Transfer Format: 32 Bit Run/Idle

Target to Scanner (Input)

T-->O Size (Bytes):  
 RPI (ms): 100  
 Trigger Type: Cyclic  
 Inhibit Time (ms): 0  
 Fallback Mode: Go to zero <default>  
 Connection Type: Multicast  
 Fixed/Variable: Fixed  
 Transfer Format: pure Data